

# Basic Energy Sciences (BES) Scientific User Facilities FY 1999 REPORTING REQUIREMENTS

## PART 1 (This Section reports *qualitative* results of surveys filled out by users)

To be distributed to every badged user (see Part 2) of a BES user facility at least once every Fiscal Year. User facility staff will implement the survey and will maintain a database of all individual responses, including verbatim comments. The facility will report at the close of each Fiscal Year the percentage of users who responded to the survey, their **aggregate responses** to each question (i.e., Q1: 10 users marked 1; 25 users marked 2; 135 users marked 3; etc.) and a summarized analysis of the comments received from the users.

### USER SATISFACTION MINI-SURVEY

NAME: \_\_\_\_\_ (Optional)

Please circle only one number for Questions 1-4 or mark NA if the question does not apply.

1. How satisfied were you with the fraction of the year that the facility operates?

1	2	3	4	5	NA
<i>Very Dissatisfied</i>	<i>Dissatisfied</i>	<i>Neither Satisfied Nor Dissatisfied</i>	<i>Satisfied</i>	<i>Very Satisfied</i>	Not Applicable

2. How satisfied were you with the schedule or service (i.e., was the time or service delivered on schedule and was downtime kept to a minimum)?

1	2	3	4	5	NA
<i>Very Dissatisfied</i>	<i>Dissatisfied</i>	<i>Neither Satisfied Nor Dissatisfied</i>	<i>Satisfied</i>	<i>Very Satisfied</i>	Not Applicable

3. How satisfied were you with the performance (i.e., was beam or service maintained close to specifications)?

1	2	3	4	5	NA
<i>Very Dissatisfied</i>	<i>Dissatisfied</i>	<i>Neither Satisfied Nor Dissatisfied</i>	<i>Satisfied</i>	<i>Very Satisfied</i>	Not Applicable

4a. How satisfied were you with the support for users provided by the facility staff?

1	2	3	4	5	NA
<i>Very Dissatisfied</i>	<i>Dissatisfied</i>	<i>Neither Satisfied Nor Dissatisfied</i>	<i>Satisfied</i>	<i>Very Satisfied</i>	Not Applicable

4b. How satisfied were you with the support for users provided by the PRT/CAT staff?

1	2	3	4	5	NA
<i>Very Dissatisfied</i>	<i>Dissatisfied</i>	<i>Neither Satisfied Nor Dissatisfied</i>	<i>Satisfied</i>	<i>Very Satisfied</i>	Not Applicable

**5. Which of the following benefits have resulted or will soon result from your use of this facility this year? (circle all that apply)**

1.
  - a. Created new fundamental knowledge (i.e., basic research)
  - b. Discovered other new knowledge (i.e., applied research)
  - c. Developed a new or improved product, process or technology (i.e, development)
2.
  - a. Dissemination of new knowledge via publication in peer-reviewed open literature
  - b. Dissemination of new knowledge via presentations at professional society meetings
  - c. Dissemination of new knowledge via other presentations
  - d. Acquired a patent
3. Furthered Department of Energy mission(s)
4. Obtained access to unique capabilities not available elsewhere (e.g., forefront experiments; one-of-a-kind instruments; distinctive materials or services)
5. Facilitated collaborative interactions (e.g., stimulated new ideas for future experiments, increased multidisciplinary work; enabled a new approach within your discipline)
6. Trained students (undergraduate, graduate or postdoctoral associate)
7. Other benefit(s); please specify:

**6. Are the training and safety procedures appropriate? If not, how would you change them?**

**7. What would you like this facility to do differently?**

**8. Other comments.**

Please provide comments for any score rating of 1 or 2 on Questions 1-4.

## PART 2 (This Section reports *quantitative* data collected by facility staff)

### QUESTIONS 1-9: User Demographics

User facility staff will collect the following information for each of their users and will maintain a database of all individual records. The facility will report at the close of each Fiscal Year a summary of the aggregate data as outlined below for that Fiscal Year. The facility will be able to provide an electronic file of the complete set of users (names, institutions and addresses) or any designated subset of the users upon request. Reporting for Questions 4-9 (below) and the minisurvey are only required for badged researchers who conduct experiments within the user facility, and reporting these data are optional for remote users.

#### QUESTIONS 1 and 2: Number of Users

BES defines a user as a person who is actually on the experimental floor doing an experiment -- this is described as a "badged" researcher in Questions 1 and 2 below. Because of the increasing types of user facilities and the increasing ability for researchers to interact remotely with user facilities, new categories of users are being counted. A remote user is defined as one who has been granted authority to remotely produce data; this excludes persons who can "look at data." Only one individual per group (e.g., the principal investigator) will be counted under those who operate instruments remotely or those who send in samples to be studied or receive other services.

**Column A** should count individual researchers only once; if a user fits multiple categories, then count them first among 1), then among 2), etc.

**Column B** should reflect all the user categories an individual researcher utilizes during the Fiscal Year. Hence, individual users should be counted more than once if they access the facility's services in different ways. The sum of Column B must be greater than or equal to the sum of Column A (the total number of users).

#### 1. TYPES OF USERS

A	B
	1) "Badged" researchers who conduct experiments within the user facility
	2) Researchers <i>outside</i> the host DOE laboratory site who operate instruments remotely
	3) Researchers <i>outside</i> the host DOE laboratory site who send in samples to be studied or receive services
	4) Researchers <i>at</i> the host DOE laboratory site who operate instruments remotely
	5) Researchers <i>at</i> the host DOE laboratory site who send in samples to be studied or receive services
	Total annual (Fiscal Year) number of users (sum of Question 1, Parts 1A, 2A, 3A, 4A and 5A) - Note: Questions 4, 5, 6, 7, 8A and 9A below must each sum to number of badged users, Q.1, Part 1A.

#### 2. USER HISTORY

A	B
	1) First-time "Badged" users who conduct experiments within the user facility
	2) First-time users <i>outside</i> the host DOE laboratory site who operate instruments remotely
	3) First-time users <i>outside</i> the host DOE laboratory site who send in samples to be studied or receive services
	4) First-time users <i>at</i> the host DOE laboratory site who operate instruments remotely
	5) First-time users <i>at</i> the host DOE laboratory site who send in samples to be studied or receive services
	Total number of <b>first-time users</b> (sum of Question 2, Parts 1A, 2A, 3A, 4A and 5A) - Note: these user-counts are subsets of the users reported under Question 1, Parts 1-5.

#### 3. NUMBER OF CO-PROPOSERS

	<b>Number of co-proposers</b>
	<b>- defined as the researchers who appear on all proposals for experiments/services run during the Fiscal Year who are not included among the users in Question 1 (individuals are counted only once)</b>

**4. EMPLOYER**

	U.S.	Academic
		Host DOE laboratory -- Staff member of the facility
		Host DOE laboratory -- Non-staff member of the facility
		Other DOE laboratories (itemize)
		Non-DOE federally funded institution (itemize)
		Industry
		Other (itemize)
	Foreign	Academic
		National laboratory
		Industry
		Other (itemize)

**5. EMPLOYMENT LEVEL**

	Undergraduate student
	Graduate student
	Postdoctoral research associate
	Faculty member / member of professional staff / research scientist
	Retired or self employed
	Other (itemize)

**6. AGE**

	Under 20 years
	20-29 years
	30-39 years
	40-49 years
	50-59 years
	60-69 years
	Over 69 years
	Not disclosed

**7. FACILITY ASSOCIATION**

	PRT/CAT member
	General User
	Other (itemize if applicable)

## QUESTIONS 8 and 9: Subjects and Funding Sources of Experiments

Data will be collected by the user facility about the user's source of funding (Question 8) and the general subject of the user's experiments (Question 9) as this information relates to the specific experiment(s) the user performs at the facility. These determinations can be made at the time of the proposal or its acceptance. Each user should be asked to simply indicate ("X") all that apply without trying to calculate actual amounts of funding or percentages. The database's individual record of the user will simply record the "X"s.

### 8. SOURCE OF SUPPORT (for the research requiring the use the facility)

**Column A** should be normalized, i.e., for users who have more than one source of support, their "X"s should be equally divided so the sum is one "X" per user (i.e., Column A should sum to the total number of users, Question 1).

**Column B** should reflect all "X"s as whole numbers (i.e., weighing multiple-support users more than single-support users). Using this data, we should be able to say that "y" users of this facility have whole or partial support for their experiments from agency "z", for example.

A	B	
		DOE, Office of Basic Energy Sciences
		DOE, Office of Biological and Environmental Research
		DOE, other (itemize)
		DOD, (itemize)
		NSF
		NIH
		NASA
		USDA
		Other U.S. Government (itemize)
		Industry
		Foreign (itemize)
		Other (itemize)

### 9. SUBJECT OF THIS EXPERIMENT OR SERVICE (for the research requiring the use the facility)

**Column A** should be normalized, i.e., for users who research more than one discipline, their "X"s should be equally divided so the sum is one "X" per user (i.e., Column A should sum to the total number of users, Question 1).

**Column B** should reflect all "X"s as whole numbers (i.e., weighing multiple disciplinary researchers more than single disciplinary researchers). Using this data, we should be able to say that "y" users of this facility have conducted experiments in "z" discipline at this facility, for example.

A	B	
		Materials sciences (includes condensed matter physics and materials chemistry)
		Physics (excludes condensed matter physics)
		Chemistry (excludes materials chemistry)
		Polymers
		Medical applications
		Biological and life sciences (excludes medical applications)
		Earth sciences
		Environmental sciences
		Optics
		Engineering
		Instrumentation or technique development related to user facilities
		Purchase of specialty service(s) or material(s)
		Other (itemize)

## QUESTIONS 10-16: Budget and Operation Data

### 10. ANNUAL BUDGET (\$ in thousands)

	Utilities
	Maintenance / operations of sources
	ES&H
	Security
	Operators/Technicians
	R&D in support of operations (e.g., for beam line development, instrumentation)
	User support
	Facility administration
	Other (itemize)
	<b>Total Annual Operating Budget</b> (sum of above)
	Capital Equipment
	ARIM
	GPP/GPE
	<b>Total Annual Budget</b> (sum of Operating, CE, ARIM and GPP/GPE)

### 11. SOURCES OF FUNDING FOR ANNUAL BUDGET (\$ in thousands)

	DOE, BES - Division of Materials Sciences
	DOE, BES - Division of Chemical Sciences
	DOE, other (itemize)
	Other (itemize)
	<b>Total Annual Budget</b> (same as for Question 10)

### 12. REPLACEMENT COST (\$ in thousands)

	<b>Original cost of facility (then-year dollars)</b>
	<b>Replacement cost of original facility (this-year dollars)</b>

### 13. HOURS OF OPERATION (total # of hours available to users for fiscal year)

	<b>Theoretical maximum number of hours for users</b> (excludes machine research, operator training, accelerator physics, etc.)
	<b>Number of hours for users allowed by the budget</b>
	<b>Scheduled hours of operation for users</b>
	<b>Hours delivered to users</b>

### 14. FRACTION OF FACILITY IN USE

	<b>For facilities with beam lines:</b>
	<b>Number of beam lines that are instrumented</b>
	<b>Total (maximum) number of beam lines that could be instrumented</b>
	<b>For facilities without beam lines:</b>
	<b>Fraction of facility instrumented</b>

FACILITY BEAM LINE STATISTICS (FOR FACILITIES THAT OPERATE BEAM LINES)

**15. USER FACILITY CONFIGURATION** (as of the last day of the fiscal year)

	<b>Number of beam ports</b>
	<b>Number of beam lines</b>
	<b>Number of end stations</b>
	<b>- provide schematic diagram(s) to help explain these configurations</b>

**16. BEAM LINE STATISTICS**

**A. Complete a separate table below for EACH BEAM LINE**

**B. Complete one USER FACILITY table which sums all the beam lines.**

Name of Beam line: \_\_\_\_\_

	<b>Annual operating cost of the beam line (\$ in thousands)</b> <b>- do not include costs of operating the facility itself</b> <b>Itemize operating cost by source below:</b>
	<b>DOE, BES - Division of Materials Sciences</b>
	<b>DOE, BES - Division of Chemical Sciences</b>
	<b>DOE, other (itemize)</b>
	<b>Other (itemize)</b>
	<b>Number of instruments on beam line</b>
	<b>Estimate of what percentage of beam line is instrumented</b>
	<b>Number of end stations on beam line</b>
	<b>End-station hours requested by users</b>
	<b>End-station hours delivered to users</b> <b>Provide two types of itemizations below:</b>
	<b>End-station hours delivered to CAT/PRT users</b>
	<b>End-station hours delivered to non-CAT/PRT users</b>
	<b>End-station hours delivered for nonproprietary research</b>
	<b>End-station hours delivered for proprietary research</b>
	<b>Total number of publications from this beam line</b> <b>Itemize:</b>
	<b>Number of publications authored/coauthored by a staff member of the facility (i.e., supported by a DOE FWP)</b>
	<b>Number of publications authored/coauthored by a non-staff member of the facility (i.e., not supported by the FWP)</b>